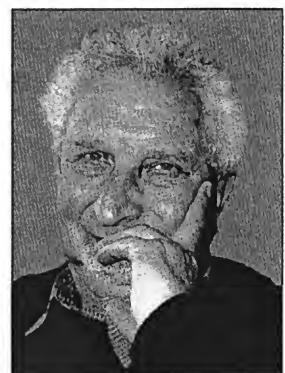


# HEMI-SYNC® Journal

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## A SYMPATHY WITH SOUNDS: HEMI-SYNC®, CONSCIOUSNESS, AND CATS



by Ronald Russell, MA

Ronald Russell lives in Scotland. He has written fifteen books and currently lectures for Glasgow University. He is codirector, with his wife, Jill, of the Russell Centre, presenting Hemi-Sync workshops in the United Kingdom, Slovakia, and Cyprus. They are both emeritus directors of the Santa Fe Forum in New Mexico and advisors to the Annwin Institute, Slovakia, as well as members of The Monroe Institute Board of Advisors. Ronald Russell's recent book, *The Vast Enquiring Soul*, explores the further reaches of consciousness. This article is based on his presentation at the 2002 Monroe Institute Professional Seminar. He believes that changes in approaches to the understanding of consciousness can illuminate the value of Hemi-Sync and reveal more of its potential. As The Monroe Institute's membership becomes more global, it is worthwhile to examine ways in which Hemi-Sync can be allied with the international language of music, and with other healing sounds, to the best possible effect.

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#### A SYMPATHY WITH SOUNDS: HEMI-SYNC®, CONSCIOUSNESS, AND CATS

Ronald Russell's long association with The Monroe Institute makes him especially qualified to analyze Hemi-Sync's expansion into mainstream culture—and its place in the current understanding of the nature of consciousness.

Along the way, he calls attention to possible innovative applications for binaural beat technology.

#### PREPARING TO USE BINAURAL BEAT SOUND WITH DEAF CLIENTS ..... v

In this intriguing pilot project, Helene N. Guttman, PhD, explores the ways and means of providing the benefits of Hemi-Sync to deaf clients.

Every other year in the early spring I receive an invitation to "Toward a Science of Consciousness," a conference held in Tucson, Arizona. The invitation is for representatives from psychology, neuroscience, cognitive science, philosophy, computer science, physics, mathematics, medicine, physiology, biochemistry, anthropology, art, and other fields. I can never decide which field fits me and feel a bit like a Christian in ancient Rome asked to play with the lions in the colosseum. This year, however, the summaries of the preconference workshops listed—amid such topics as "Imitation, Language, Intentionality and Intersubjectivity Studied with TMS and fMRI" and "Introduction to Mimetics"—a workshop on "Parapsychology: State of the Art and Implications for Consciousness Studies" by Charles Tart and Marilyn Schlitz. Well, I thought, that's a breath of fresh air. Does it mean that—at last—there is a dawning recognition in Tucson that consciousness is rather more than a function of the brain? That subjective experience is essential to any understanding of consciousness?

There certainly is a shift. After Jill and I first visited The Monroe Institute (TMI) in 1986, I searched the literature, books, and learned papers, for references to Bob Monroe, Hemi-Sync, TMI, and so on. I found very little. Most of the few papers available were produced by people with TMI con-

nections and published by TMI. *Journeys Out of the Body*, of course, was very well known, and an article on Monroe's out-of-body experiences (OBEs) had appeared in the *American Journal of Psychology* in 1982. I came across J. H. M. Whiteman's *Old and New Evidence on the Meaning of Life*, which included a somewhat suspicious account of Monroe's OBEs. The first serious published assessment of Monroe's work that I found, however, was in Charles Tart's *Open Mind, Discriminating Mind*. This was before the days of the Internet and all I had to use were the massive resources of the Cambridge University Library. There must have been material that I didn't know about available in the United States. But Monroe certainly did not go out to seek publicity.

Now things are different. There are references to Monroe's work in Michael Talbot's *The Holographic Universe*, Christopher Bache's recent *Dark Night, Early Dawn*, Susan Blackmore's *Beyond the Body*, further books by Charles Tart, the work of Russell Targ and Jane Katra, the recently published reference study *Varieties of Anomalous Experience*, and many more. There are also Monroe-focused books by Joe McMoneagle, Skip Atwater, Gari Carter, Frank DeMarco, Joe Gallenberger, Rosie McKnight, and Bruce Moen; the groundbreaking work of Suzanne Morris; many research projects, studies, degree theses, and articles in journals and periodicals such as Larry Dossey's *Alternative Therapies, Anaesthesia, The Journal of Scientific Exploration, Network*, and *The Wall Street Journal*. Laurie, Skip and others are frequently invited to speak at conferences and symposia. In Slovakia, the Annwin Institute uses Hemi-Sync as a component of its training programs, and there are flourishing Monroe outposts in Spain, Cyprus, Germany, and other countries.

Bob Monroe did not set out to devise a theory of consciousness, but he was fully aware of its prime importance. He was an explorer of consciousness—involuntarily to begin with—and he sought to create maps of the territories he personally explored, referred to as Locales 2 and 3. He was convinced that "focused consciousness contains definitive solutions to the questions of human experience," and he used neuromapping and biomonitoring to ensure that the Institute operated as far as possible within scientific parameters. But he was aware that measurement, so vital to orthodox science, was not an appropriate method. Measurement applied to thought would be like measuring the smoke instead of the fire. "The best that can be done," says a TMI leaflet published in 1989, "is to establish physiological corollaries to support the mass of anecdotal information brought forth by the reporting human mind." At the same time, this leaflet admits, "our research has not been designed to conduct studies in form and protocol that will insure acceptance by orthodox segments of our culture."

Research, of course, there has been. Interestingly, when I looked a few months ago at what was described as the scientific background to the products of a recently formed organization claiming to use binaural beats to effect changes in consciousness, more than half the quoted materials were papers issued by TMI. Imitation is the sincerest form of flattery. Skip

Atwater's recent work has illuminated the response of the brain to the various frequencies embedded in TMI's exercises—maybe it is now possible to measure the fire instead of the smoke.

But what seems especially significant is the indication of a shift in the way that the problem of human consciousness—what it is and how it works—is approached. That 1989 leaflet was entitled "Are Thoughts Really 'Things'?" Perhaps the next leaflet will be titled "Are Things Really 'Thoughts'?" There is a growing body of evidence indicating that consciousness can function independently of the brain, that it is not dependent upon time and space, and that it is ultimately indestructible. Evidence for that viewpoint comes from such diverse sources as near-death experiences, out-of-body experiences, remote viewing, remote healing, telepathy, psychokinesis, and precognition, as well as from the thousands of experiments conducted by Robert Jahn and Brenda Dunne at Princeton University, Dean Radin at the University of Nevada, and Robert Morris at Edinburgh, and it is supported by the conclusions of Amit Goswami, Edgar Mitchell, Peter Russell, and many others. The way in which the physicist Amit Goswami made his shift in understanding is especially noteworthy. He was trying to sort out in conversation with a friend what he saw as inconsistencies in the material for his forthcoming book, *The Self-Aware Universe*. Goswami sought to express the idea of consciousness that he had gained from his study of quantum theory. His friend interrupted him. "You're wearing scientific blinkers that keep you from understanding," he said. "Underneath you have a belief that consciousness can be understood by science, that consciousness emerges in the brain, that it is an epiphenomenon. Comprehend what the mystics are saying. Consciousness is prior and unconditioned. It is all there is. There is nothing but God." In the published book Goswami points out that we miss the truth because "We are so enamoured of our attempts to predict and control, to understand and manipulate everything rationally. In our efforts we miss the simple thing—the truth that it is all God, which is the mystic's way of saying that it is all consciousness. Physics explains phenomena, but consciousness is not a phenomenon; instead all else are phenomena in consciousness. I had vainly been seeking a description of consciousness within science; instead, what I and others have to look for is a description of science within consciousness. We must develop a science compatible with consciousness, our primary experience."

Experience with Hemi-Sync has shown many of us that this is so. Aristotle and Spinoza came to similar conclusions before us. And now Goswami's conclusion is supported by more and more research. But the work—the attempt to reach a full understanding—has a long way to go. Only ten years ago physicist Richard Feynmann remarked, "I think I can safely say that no one understands human consciousness." And seven years ago Stuart Sutherland wrote: "Consciousness is a fascinating but elusive phenomenon; it is impossible to specify what it is, what it does, or why it evolved. Nothing worth reading has been written about it." All the same, we try.

At the end of his recent study, *Understanding Consciousness*, Max Velmans quotes a passage by Carl Jung. Jung was traveling in Africa in 1925 and came to the Athi Plains, a game reserve near Nairobi. "To the very brink of the horizon we saw gigantic herds of animals: gazelle, antelope, gnu, zebra, warthog and so on. Grazing, heads nodding, the herds moved forward like slow rivers. There was scarcely any sound save the melancholy cry of a bird of prey. This was the stillness of the eternal beginning, the world as it had always been, in the state of non-being; for until then no one had been present to know that it was this world." Jung walked away from his companions to savour the feeling of being entirely alone. He saw himself as if he was the first human being to recognize that this was the world, but who did not know that in this moment he had first really created it. He continued: "There the cosmic meaning of consciousness became overwhelmingly clear to me. . . . Man, I, in an invisible act of creation put the stamp of perfection on the world by giving it objective existence. This act we usually ascribe to the Creator alone, without considering that in doing so we view life as a machine calculated down to the last detail, which, along with the human psyche, runs on senselessly, obeying foreknown and predetermined rules. In such a cheerless clockwork fantasy there is no drama of man, world and god: there is no 'new day' leading to 'new shores' but only the dreariness of calculated processes."

Jung recalled an old Pueblo Indian friend of his who thought that the *raison d'être* of his pueblo had been to help their father, the sun, to cross the sky each day—and I know that the boys of the Indian School at Santa Fe run every morning to help the sun to rise. Jung had envied his friend for the fullness of meaning in that belief and had been searching, with little hope, for a myth of his own.

"Now I knew what it was," he continues, "and even more: that man is indispensable for the completion of creation; that, in fact, he himself is the second creator of the world, who alone has given to the world its objective existence—without which, unheard, unseen, silently eating, giving birth, dying, heads nodding through the millions of years, it would have gone on in the profoundest night of nonbeing down to its unknown end. Human consciousness created objective existence and meaning, and man found his indispensable place in the great process of being."

Max Velmans comments that in this vision, life and evolution have a purpose that can only be understood in first-person terms. He would prefer to think of consciousness as the creator of subjective realities rather than objective existence, preferring a less anthropocentric view. He adds: "Whether one prefers to think of realities immensely larger than oneself as 'God,' the 'universe,' or the 'natural world' is also a matter of personal choice. But the essential insight is the same: consciousness gives

meaning to existence." By extension, the more alert and awake, flexible, and penetrating one's consciousness is, the richer and fuller will be one's existence.

If we are able to accept the primacy of consciousness, we may also be able to accept that there is greater potential in Hemi-Sync than has so far been revealed or discovered. Instead of a theory or an attempted explanation, Monroe gives us the tools that we can use to make our own explorations and discoveries. He gives us also a map—but it is not like a road map. It resembles more one of those early maps of North America, quite accurate on the states of the eastern seaboard but becoming less detailed, more open, the further west you go. And especially for those of us who are not, by birth, nature, or practice, mystics or visionaries, who are not gifted with the old Highlanders' second sight, who are not, for example, instinctive remote viewers or healers, this gift of Bob Monroe's provides the opportunity, if we wish to take it, to move into that open country to the west, to break through our limitations, to become free.

When we attend programs at TMI, we move away from our everyday existence into a sort of magical realm—a realm that we can explore and enjoy while knowing that on our return we don't have to catch and cook our food or sling our hammocks inexpertly between trees. It's a realm where linear time becomes irrelevant, where space expands and contracts as it happens, and where (I trust) mobile phones and email are banned. This realm is not in any way a "never-never land." It carries its own reality. Looking over some TMI material after my *GATEWAY VOYAGE™* course seventeen years ago, I noted that TMI is described as an educational and research establishment. I wondered at that—educational? What was taught? It was the wrong question. It should be, "What was learned?" Not all of



*Suki—the Russell's inspiration*

us will answer the same—but all the answers will certainly relate to the unlimited power of consciousness.

There is another realm that some of us have visited in the *LIFELINE™* course and the other courses that take you to Focus™ 27 and beyond. I would describe it as the imaginal realm, a term coined by Henry Corbin, the great Sufi scholar. Robert Monroe's Park in Focus 27 is, to use his own words: "an artificial synthesis created by human minds. . . . It takes on the form of various earth environments in order to be acceptable to the enormously wide variety of newcomers." In ordinary consciousness (C-1) some of us may have problems with this, but in that phase or state of consciousness labeled Focus 27 such problems disappear. There seems little or no purpose in seeking to explain or analyze Focus 27 experiences in terms of C-1. You can, if you wish, seek to establish the actual identity of the Bill Brown you found in Focus 23 and conducted to the Park in Focus 27. But if you accept that consciousness is non-local or nonlocated, and therefore is independent of time and

space, then there should be no problem. Just take the experience on board and go on to the next thing.

I'd like now to move to those phases of consciousness labeled Focus 10 and 12. Thanks to Bob Monroe, his coworkers, and his successors, Hemi-Sync now addresses almost all the concerns of human existence: birth, life and death, health (including surgery), education, intellect, emotion, behavior, dreams, and so on. In our sixteen years' work with Hemi-Sync, Jill and I have discovered that if you know your tapes well enough you can find something appropriate to almost any situation. When we presented workshops in Slovakia, using both English and Slovak, we found that the responses of the participants paralleled typical responses of participants in the United States or United Kingdom. There are members of TMI in nearly fifty countries to date. In many of these countries, English is not the native language and in some it is not the second language either. There are many more countries into which Hemi-Sync may well penetrate in the next few years. It is feasible to translate the *GATEWAY* texts into French and Spanish, but taking translation further will become a major, if not insuperable, problem. However, there does exist an international language—the language of music. We know when Hemi-Sync is combined with music (a) it performs as advertised, and (b) it does not interfere with the pleasure of listening.

Let's look at just one aspect—healing—the focus of this conference. In his book *The Mozart Effect*, Don Campbell gives examples of forty-eight illnesses and conditions for which music, either compositions or toning, has proved helpful and often curative. To take one example close to home—which Campbell himself mentions—there is the wonderful work of speech-language pathologist Suzanne Morris, who uses *METAMUSIC* with young children with cerebral palsy and similar conditions.

Embedding Hemi-Sync in the type of music that Campbell describes could intensify the healing effect. Is there a way forward here? Would it be possible, or desirable, to blend Hemi-Sync with music to help those making the transition from this life—to wherever? No words would be needed. And what about blending Hemi-Sync with music from the '40s and '50s for those in residential homes, geriatric wards, hospices, and similar places? This would be much more stimulating than the all-day exposure to random channels of television that so many old people must endure.

Some years ago a music scholar worked with us using Hemi-Sync for several months. She was an expert on J. S. Bach. One day, quite excited, she declared that there was Hemi-Sync in some of Bach's cantatas. Technically speaking there isn't. I guess she was saying that certain passages produced a similar effect to binaural beat signals for Focus 10 and 12. Jill and I had noticed the same type of effect at the Buddhist temple at Samye Ling in Scotland. At each side of the temple a gong was being struck and the effect was a kind of glorified Focus 12. What these experiences show is the power and range of Monroe's technology—that it can be related to the most outstanding examples of composed music and to the sacred sounds

of established religion.

From this, I suggest, it follows that we should beware of trivializing this gift. If we are going to embed it in music, then the music we choose, classical or popular, or specially composed, should be chosen from the best of its kind and excellently performed. I came upon some interesting research recently (*The Journal of the Royal Society of Medicine*, number 94, 2001, by J. S. Jenkins, MD, FRCP) that showed that listening to Mozart's Sonata for Two Pianos No. 23 (K448) resulted in significantly better spatial temporal reasoning skills in normal subjects. This effect lasted up to fifteen minutes after the music ended. Further recent research showed that frequent listening to this sonata resulted in a marked diminution and reduction of attacks of epilepsy as shown by EEG readings of epileptiform activity. This improvement was also recorded with a comatose patient, demonstrating that it was not due simply to appreciation of the music. Now it happens that this sonata was adapted and performed by J. S. Epperson for the *METAMUSIC* composition *Einstein's Dream*, as a consequence of earlier investigation at the University of California when it was shown to have a short-term effect on the IQ of a number of students. This opens the door to interesting prospects for further research.

I called this talk "A Sympathy with Sounds." I'd like in conclusion to mention a particular sound that is not to do with music as such but which may be combined with Hemi-Sync to valuable effect. In 2001, having read a newspaper article about the beneficial effects of cats' purring, I contacted the Fauna Communications Research Institute in North Carolina. You can reach them at <http://www.animalvoice.com> Their president told me that cats' purrs "have frequencies with strong harmonics only at the same frequencies that are the best for bone growth, muscle and tendon repair, pain relief, and the reduction of edema." We believe a cat could have a positive effect on individuals experiencing such problems, possibly including osteoporosis. A noninvasive and very cost-effective (owning a cat) way to treat such conditions would be of great value to the world, especially for impoverished countries and those unable to afford medical insurance. The optimal frequencies are 25 and 50 Hz, the two low frequencies that best promote bone growth and fracture healing. A team headed by Dr. Clinton Rubin has found that bones of both chickens and rabbits are strengthened by daily exposure to low frequency vibration (20–50 Hz). There have been several studies in different countries showing that low frequency vibrational stimulation is effective for pain relief and repair of muscles and joints after injury.

Incidentally, cats do not purr only when they are contented but also when they are injured. Their recovery rate from injury is rapid, far faster than that of dogs. Mention of dogs reminds me that Hemi-Sync is beneficial to dogs, as Suzanne Morris can testify. Suzanne's golden retriever, Finn, took almost everything except thunderstorms in his stride. About thirty to forty-five minutes "before the skies blackened and lightening began," he would begin to quake with fear, drool, whine, and attempt to hide. Neither Suzanne's presence, homeopathic and herbal remedies, nor prescription medication were effective. For eight

years Finn lived in fear of severe thunderstorms. "Then," Dr. Morris told me, "during one particularly noisy storm, I noticed that my boom box was sitting on the living room floor near the table under which Finn was cowering. Without thinking, I turned it on and placed it right in front of his nose and played *METAMUSIC Inner Journey*. Within five minutes his body tremors had stopped. The wild look in his eyes began to recede. He placed his head down on his paws and appeared to be listening to the music. Within ten minutes his eyes closed and he slept through the remainder of the storm. At that moment thunderstorms ceased their power over Finn's life, although he continued to be uneasy when he anticipated the approach of a storm. However, he now had a special boom box, which I placed on the floor of the downstairs bathroom, his storm retreat room. When he came into the house, he immediately headed for the bathroom and lay down with his nose against the boom box. He calmed as the *METAMUSIC* filled his ears. He usually slept during the storm itself and emerged as soon as it was over."

Hemi-Sync also pacifies horses. My niece is a champion rider with a large stable. She competes in horse shows and has a large van that carries five horses. She plays Hemi-Sync in the horse van on the way to a show to relax the animals. This prevents them from being disqualified because they have tensed up from the journey and consequently measure above the maximum height for their class.

Returning to cats, the Fauna Communications Research Institute is currently seeking funding to study the effects that the purr might have on the human body. Meantime, of course, we can get on with our own research. But not all cats are content to sit beside their owner, or lie on their owner's lap, for hours at a time. Many prefer the challenges of outdoor life—cats, we know, have wills of their own. So . . . I submitted the information from Fauna Communications to TMI and now we have the *Purrfect Hemi-Sync* CD, a Hemicat that is quite content to remain indoors in close proximity to its owner indefinitely and combines Hemi-Sync signals with the characteristic purring of a cat. Jill has met this creature already. In 2001 she had two "sprung ribs." Her osteopath sent her to the local cottage hospital for an x-ray to rule out fractures. When the osteopath saw the films, she said signs of osteoporosis were evident. After eight months of listening to the purring Hemi-cat every night, Jill went for a follow-up scan. Her sacrum was scanned and she was told that any osteoporosis anywhere would also show up there; it didn't. Interestingly, Jill had listened to *Purrfect Hemi-Sync* so intensively to relieve chronic insomnia. Doing so did not "cure" her insomnia but her sleep pattern definitely improved. It's our feeling that listening to the Hemi-cat throughout the night, or even once on going to bed, could produce similar benefits for others.

Hemi-Sync has proved to be a most powerful and elegant means of exploring human consciousness without any complications or side effects. It is up to the Professional Division members to continue developing more means and ways by which this technology can continue to benefit humans and other creatures, great and small.

## PREPARING TO USE BINAURAL BEAT SOUND WITH DEAF CLIENTS



by Helene N. Guttman, PhD

*Helene N. Guttman, PhD, is president of HNG Associates/Sound Balance in Bethesda, Maryland, where she has a private transpersonal counseling practice and does research on states of awareness. Prior to her current career, Dr. Guttman was a professor in medical and graduate schools—where she did a wide range of research and published in several multidisciplinary areas. She also taught and held administrative appointments. Some of her research and teaching pioneered proving the relationship of certain biomolecules (small peptides) synthesized as a result of "learning" changed behaviors. After her academic career, she held administrative positions in federal science agencies such as the National Institutes of Health, the U.S. Environmental Protection Agency, and the U.S. Department of Agriculture, where—among other appointments—she was associate director of a Human Nutrition Research Center. For a description of Helene Guttman's transpersonal counseling practice and certifications, visit her Web site, <http://www.soundbalance.net>. She may be contacted by email at hguttman@soundbalance.net*

People with normal hearing, as well as those who are profoundly deaf, sense sound vibrations. These sensations do not always "enter" via the ears. How can we make use of this ability so that profoundly deaf individuals can utilize binaural beat audiotapes, such as The Monroe Institute's Hemi-Sync®, to stimulate beneficial changes in states of awareness readily enjoyed by individuals with normal hearing?

There are some clues in the way profoundly deaf individuals sense sound vibration. Evelyn Glennie, a profoundly deaf, internationally famous musician, is a percussionist who performs barefooted in order to sense her own instruments and those of the accompanying orchestra. Is this a special trait reserved for gifted, trained musicians? No! For example, in July 2002 a major international festival called Deafway II was held in Washington, D.C., at Gallaudet University, the premier educational institution for the deaf and hard of hearing. Many people with normal hearing were surprised to learn that the program included dancing to rock bands. Their beats were easily followed by the deaf dancers through the vibrations of the music coursing up from their feet through their bodies. Deaf nondancers clustered around the loudspeakers, placed their hands on the speakers, and swayed to the beat coursing through their bodies from their hands. So, must deaf individuals place either their feet or hands on loudspeakers to



enjoy the benefits of Hemi-Sync? As will be shown, all people, hearing or deaf, sense sound via several routes—the ears being just one.

The objective of this study was to locate convenient and comfortable placements for inexpensive, readily available headphones on deaf individuals. These placements would allow them to use Hemi-Sync to move into different states of consciousness and achieve the benefits enjoyed by hearing individuals, such as relaxation and pain control. Since Hemi-Sync-induced changes in states of awareness are usually accompanied by synchrony between the left and right sides of the brain at the same frequency, these electrophysiological changes were used to determine the best non-ear placements for headphones.

Six hearing individuals were the subjects. Using 16-channel EEG brainmapping equipment, EEGs were measured while sound was delivered through headphones placed over the ears or at other head locations. The brainmapper was employed to ascertain whether there were specific electrophysiological responses that were independent of the anecdotal reports of the individual being tested. When non-ear locations were tested, subjects were fitted with earplugs to prevent sound sensation via the ears.

The tapes used were either a Hemi-Sync-embedded meditation music tape entitled *METAMUSIC Inner Journey* or an *Inner Journey* tape lacking Hemi-Sync (kindly provided by Dr. Darlene Miller of The Monroe Institute)<sup>1</sup> or the Hemi-Sync-embedded tape *Touring the Interstate* from the *GOING HOME* series.

Both subjects and operator were unaware (blinded to) which tapes were being played. Therefore, subjects had no "clues" as to what they might experience. During playing of a tape, the operator viewed the brainmap on the computer screen.

Results showed that left-right brain synchrony could be achieved with headphones placed at several non-ear locations. The best location—judged both for comfort and ease in keeping headphones in place—was approximately one inch above and slightly behind each ear.<sup>2</sup> In addition, subjects reported relaxation and a "feeling of lightness" with both versions of *Inner Journey*.

Anecdotal reports of subjects fitted with headphones at non-ear locations during the playing of *Touring the Interstate* were particularly interesting. Although the subjects received no clues as to what to expect—either from the operator or from the verbiage on the tape—their experiences replicated the essence of reports by individuals who had listened to the instructions on the tape and had also read the instructions for *GOING HOME*. They described moving through different colors (representing different Focus levels), then visualizing or hearing deceased relatives or "non-earthly beings."

1 This pair of tapes was used to establish that nonhuman subjects responded to Hemi-Sync with both left-right brain synchrony and noticeable behavioral changes (Guttman, 1991; Guttman and Bliley, 1992).

2 Approximately between T<sub>3</sub> and T<sub>5</sub> on the left and between T<sub>4</sub> and T<sub>6</sub> on the right (using the International 10–20 Standard Electrode Placement map).

Subsequent to completion of this series of experiments, an American Sign Language (ASL) translator, who also is a hypnotherapist,<sup>3</sup> suggested still another headphone placement that might be even more comfortable. This placement is roughly over the carotid (neck) arteries and can be perceived by first feeling the pulsation of the arteries and then placing the headphones over the pulsation. Using the *Touring the Interstate* tape, a client replicated—in general—the same report as with headphones located over other non-ear head locations. Proof that this was indeed due to the Hemi-Sync sounds delivered through the nerve close to the carotid arteries came when the headphones inadvertently slipped from their placement. The subject, an experienced Hemi-Sync user, then reported that the "experience" was ending and that she was returning to her usual conscious state.

As a result of this study with control subjects, I am in the process of including various Hemi-Sync-embedded tapes with deaf clients, and I encourage others to do so, too.

3 Personal communication from Chris Adshade, 2002.

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